MC5

QUICK REFERENCE GUIDE

LINK
Technologies, Inc.

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CHAPTER 1
LINK MC3 and WYSE 60 COMMANDS

FUNCTION	LINK MC3 WYSE 60
MONITOR MODE	
Monitor Mode On	ESC U
Monitor Mode Off	ESC u or ESC X
SELECTING OTHER PERSONALITIES	
Select WY-50+ Mode	ESC ~ "
Select TVI 910+ Mode	ESC ~ #
Select TVI 925 Mode	ESC ~ $
Select ADDS VP A2 Mode	ESC ~ %
Select TVI 950 Mode	ESC ~ (
Select ADM 3A Mode	ESC ~ +
Select TVI 955 Mode	ESC ~ ,
Select WY-60 Mode	ESC ~ 4
Select PC Term Mode	ESC ~ 5
Select VT52 Mode	ESC ~ 6
Select ADDS VP 60 Mode	ESC ~ 8
Select VT100 Mode	ESC ~ ;
Select VT220-7 Mode	ESC ~ <
Select VT 220-8 Mode	ESC ~ =
Select VT 320	ESC ~ >
COMMUNICATING WITH THE COMPUTER	
Enable Transmission	CTRL Q
Stop Transmission	CTRL S
Send ACK (if ACK mode on)	CTRL E
ACK Mode Off	ESC e 6
ACK Mode On	ESC e 7
Full-Duplex Mode On	ESC C ESC D F
Half-Duplex Mode On	ESC C ESC D H
Block Mode On	ESC B
Half-Duplex Block Mode On	ESC D H ESC B
Select MODEM Port for Data Communications	ESC e 8
Select AUX Port for Data Communications	ESC e 9
Set MODEM Port Operating Parameters [1, 2, 3, 4] See Table A-1 for parameters	ESC c 0 baud stop parity word
Set AUX Port Operating Parameters [1, 2, 3, 4] See Table A-1 for parameters	ESC c 1 baud stop parity word

CHAPTER 1
LINK MC3 and WYSE 60 COMMANDS

FUNCTION	LINK MC3 WYSE 60
Set MODEM Port Handshaking	ESC c 4 hndshk
Receive none, Transmit none	ESC c 4 0
Receive X-on/X-off, Transmit X-on/X-off	ESC c 4 1
Receive DIR (MODEM port), Receive DSR (AUX port)	ESC c 4 2
Receive Both	ESC c 4 0
Set AUX Port Handshaking	ESC c 5 hndshk
Receive none, Transmit none	ESC c 5 0
Rcv. X-on/X-off, Trans. X-on/X-off	ESC c 5 1
Receive DIR (MODEM port), Receive DSR (AUX port)	ESC c 5 2
Receive Both	ESC c 5 0
Set Maximum Data Transmission Speed	ESC c 6 max
Maximum Speed = 60 characters per sec.	ESC c 6 1
Maximum Speed = None	ESC c 6 2
Maximum Speed = 150 characters per sec.	ESC c 6 3
Send Terminal ID	ESC SPACE
Program Answerback Message (answer = Up to 20 characters to define answerback message)	ESC c ; answer CTRL Y
Send Answerback Message	ESC c <
Conceal Answerback Message	ESC c =
Answerback Mode Off	ESC e SPACE
Answerback Mode on	ESC e !
Load Time of Day	ESC c 8
hh = Hour (2-digit decimal #00-23) mm = Minutes (2-digit decimal #00-59)	hh mm
CONTROLLING THE TERMINAL AND KEYBOARD	
Local Edit Mode On	ESC k
Duplex Edit Mode On	ESC l
Initialize Tabs Off	ESC e :
Initialize Tabs On	ESC e ;
Sound Bell	CTRL G
Unlock Keyboard	CTRL N or ESC "
Lock Keyboard	CTRL O or ESC #

CHAPTER 1
LINK MC3 and WYSE 60 COMMANDS

FUNCTION	LINK MC3 WYSE 60
Keyclick Off	ESC e $
Keyclick On	ESC e %
CAPS LOCK On	ESC e &
CAPS LOCK Off	ESC e '
Margin Bell Off	ESC e L
Set Margin Bell at Cursor Position	ESC ` J
Margin Bell On	ESC e M
Key Repeat Off	ESC e ,
Key Repeat On	ESC e -
Define CAPS LOCK Key as CAPS LOCK	ESC e T
Define CAPS LOCK Key as REV	ESC e U
REDEFINING THE KEYS	
Program Function Key Definition (sequence = Up to 255 bytes to be loaded in function key) (SeeTables A-2 & B-1 for fkey values)	ESC z fkey sequence DEL
Program Key Direction & Definition (sequence = Up to 255 bytes to be loaded in function key) (SeeTables A-2 & B-1 for fkey values) dir = Direction 0 Normal 1 Remote 2 Local	ESC Z dir fkey sequence DEL
Read Key Direction & Definition (See tables A-2 & B-1 for fkey values)	ESC Z ~
Clear Key Definition (See tables A-2 & B-1 for fkey values) (See Program Key Direction & Definition for direction values) Clear All Function Keys	ESC z fkey DEL or ESC Z dir fkey DEL
Set Maximum Function Key Transmission Speed Maximum Speed = 60 characters per sec. Maximum Speed = None Maximum Speed = 150 characters per sec.	ESC c 7 max ESC c 7 1 ESC c 7 2 ESC c 7 3
Load Function with Default	
Default All Programmable Keys	ESC c U
SCREEN AND CURSOR DISPLAY	
Screen Display Off	ESC ` 8
Screen Display On	ESC ` 9
Screen Saver Off	ESC e P
Screen Saver On	ESC e Q

CHAPTER 1
LINK MC3 and WYSE 60 COMMANDS

FUNCTION	LINK MC3 WYSE 60
Reverse Screen	ESC ^ 1
Restore Normal Screen	ESC ^ 0
Set Scrolling Speed and Type	ESC ` scroll
Jump scroll	ESC ` @
Smooth scroll 1 line per second	ESC ` <
Smooth scroll 2 lines per second	ESC ` =
Smooth scroll 4 lines per second	ESC ` >
Smooth scroll 8 lines per second	ESC ` ?
Set Cursor Display Features	ESC ` cursor
Cursor display off	ESC ` 0
Cursor display on	ESC ` 1
Steady block cursor	ESC ` 2
Blinking block cursor	ESC ` 5
Steady line cursor	ESC ` 4
Blinking line cursor	ESC ` 3
DISPLAYING THE MESSAGE FIELDS	
Extended Status Line On	ESC ` a
Standard Status Line On	ESC ` b
Status Line Off	ESC ` c
Program/Display Computer Message on Status Line message = 46 characters 80 col screen message = 98 characters132 col. screen	ESC F message CR
Program Computer Message on Unshifted Label Line Automatically displayed in native mode. May be hidden by assigning blank attribute (ESC A 1 1). text = 78 characters 80 col. screen text = 130 characters132 col. screen	ESC z (text CR
Program Computer Message on Shifted Label Line text = 78 characters 80 col. screen text = 130 characters132 col. screen	ESC z) text CR
Display User Line	
Disable User Line	
Turn Off Unshifted Label Line	ESC A 11
Display Shifted Label Line	ESC z P CR
Tur n Off Shifted Label Line	ESC z DEL
Clear Unshifted Label Line	ESC z (CR

CHAPTER 1
LINK MC3 and WYSE 60 COMMANDS

FUNCTION	LINK MC3 WYSE 60
Clear Shifted Label Line	ESC z) CR
Program/Display Function Key Label (See Table A-3 for field values) label = 9 characters on 80 column screen label = 7 characters on 132 col. screen	ESC z field label CR
Clear Function Key Label (See Table A-3 for field values)	ESC z field CR
Don't Save Function Key Labels	ESC e J
Save Function Key Labels	ESC e K
DEFINING THE DATA AREA	
Select 80-Column Display	ESC ` :
Select 132-Column Display	ESC ` ;
Width-Change-Clear Mode Off	ESC e .
Width-Change-Clear Mode On	ESC e /
Display 24 Data Lines	ESC e (
Display 25 Data Lines	ESC e)
Display 42 Data Lines	ESC e *
Display 43 Data Lines	ESC e +
DISPLAY MEMORY/SPLIT SCREEN	
Display Previous Page (If screen is not split)	ESC w B or ESC J
Display Next Page (If screen is not split)	ESC w C or ESC K
Display Page 0	ESC w 0
Display Page 1	ESC w 1
Display Page 2 (80-column only selected)	ESC w 2
Display Page 3	ESC w 3
Display Page 4	ESC w 4
Display Page 5 (80-column only selected)	ESC w 5
Display Page 6 (80-column only selected)	ESC w 6
Activate Upper Window	ESC [
Activate Lower Window	ESC]
Activate Other Window (or Page)	ESC J or ESC K
Lower Horizontal Split	ESC x P
Raise Horizontal Split	ESC x R
Roll Window Up in Page	ESC w E
Roll Window Down in Page	ESC w F
Redefine Screen as One Window	ESC x @
Redefine Screen as 1 Window & Clear Pages	ESC x O
DISPLAY ATTRIBUTES	
Assign Display Attribute to a Message Field (See Tables B-2 & B-3)	ESC A n attr

CHAPTER 1
LINK MC3 and WYSE 60 COMMANDS

FUNCTION	LINK MC3 WYSE 60
Assign Character Display Attribute (See Table B-4)	ESC G attr
Character Attribute Mode Off	ESC e 0
Character Attribute Mode On	ESC e 1
Page Attribute mode On	ESC e 2
Line Attribute Mode On	ESC e 3
Assign Write-Protected Character Display Attribute	ESC ` wpca
Reverse (Clears other write-protected attributes)	ESC ` 6
Dim (Clears other write-protected attributes)	ESC ` 7
Normal (Clears other write-protected attributes)	ESC ` A
Blink on	ESC ` B
Invisible on	ESC ` C
Underline on	ESC ` E
Reverse on	ESC ` F
Dim on	ESC ` G
Assign Line Attribute	ESC G lattr
Single-high, single-wide characters	ESC G @
Single-high, double-wide characters	ESC G A
Top half of double-high, single-wide char.	ESC G B
Bottom half double-high, single-wide char.	ESC G C
Top half of double-high, double-wide char.	ESC G D
Bottom half double-high, double-wide char	ESC G E
Normal background	ESC G G
Bold background	ESC G H
Invisible background	ESC G I
Dim background	ESC G J
PROTECTING DATA	
Write-Protect Mode Off	ESC (
Write-Protect Mode On	ESC)
Clear Cursor Column to Write-Protected Spaces	ESC V
Protect Mode Off	ESC '
Protect Mode On	ESC &
GRAPHICS CHARACTERS	
Graphics Mode On	ESC H CTRL B
Graphics Mode Off	ESC H CTRL C
Display Graphics Character	ESC H ldraw

CHAPTER 1
LINK MC3 and WYSE 60 COMMANDS

FUNCTION	LINK MC3 WYSE 60
CONTROLLING THE CURSOR	
Cursor Left (Backspace)	CTRL H
Cursor Right	CTRL L
Cursor Up; No Scroll	CTRL K
Cursor Up; Scroll (Reverse Linefeed)	ESC j
Cursor Down; Scroll (linefeed)	CTRL J
Cursor to Start of Line	CTRL M
Cursor to Start of Next Line	CTRL
Home Cursor	ESC { or CTRL ^
End-of-Line Wrap Off	ESC d .
End-of-Line Wrap On	ESC d /
Received CR Mode Off	ESC e 4
Received CR Mode On	ESC e 5
Autopage Mode Off	ESC d *
Autopage Mode On	ESC d +
Autoscrolling Mode Off	ESC N
Autoscrolling Mode On	ESC O
Line Lock Mode On	ESC ` H
Line Lock Mode Off	ESC ` I
Address Cursor in 80-Column Current Page (See Table A-5 for line/col.)	ESC = line col
Address Cursor in Specific 80-Column Page (See table A-5 for line/col.) wnd/page = window or page 0 Page 0 or upper window 1 Page 1 or lower window 2 Page 2 3 Page 3 4 Page 4 5 Page 5 6 Page 6	ESC w @ page line col
Address Cursor in Specific 80-Column Window/page(If screen is not split.) (See table A-5 for line/col.) (See above for Window/page values)	ESC - wnd/ page line col
Address Cursor in 80/132-Col. Current Page lll = One to three-decimal value of line relative to home ccc = One to three-decimal value of column relative to home	ESC a lll R ccc C
Read Cursor Address in 80-Column Current Page	ESC ?
Read 80-Col. Page # and Cursor Address	ESC w `
Read 80-Column Window/Page Number and Cursor Address	ESC /

CHAPTER 1
LINK MC3 and WYSE 60 COMMANDS

FUNCTION	LINK MC3 WYSE 60
Read Cursor Address in 80/132-Col. Page	ESC b
EDITING	
Clear All Tab Stops	ESC 0
Set Tab Stop	ESC 1
Clear Tab Stop	ESC 2
Tabulate Cursor	ESC i or CTRL I
Backtab	ESC I
Insert Mode On, Replace Mode Off	ESC a
Insert Mode Off, Replace Mode On	ESC r
Page Edit Mode Off	ESC e "
Page Edit Mode On	ESC e #
Insert Space Character	ESC O
Insert Line of Spaces	ESC E
Insert Column of Nulls	ESC c M
Delete Cursor Character	ESC W
Delete Cursor Line	ESC R
Delete Cursor Column	ESC c J
CLEARING DATA	
Clear Page to Nulls	ESC *
Clear Page to Spaces	ESC +
Clear Page to Write-Protected Spaces	ESC ,
Clear Unprotected Page to Spaces	ESC ; or CTRL Z
Clear Unprotected Page to Nulls	ESC :
Clear Unprotected Page to a Specific Character (char = character that replaces unprotected characters)	ESC . char
Clear Unprotected Pg. to Spaces from Cursor	ESC Y
Clear Unprotected Page to Nulls from Cursor	ESC y
Clear Unprotected Page Foreground to Spaces	ESC c P
Clear Unprotected Page Foreground to Nulls	ESC c Q
Clear Unprotected Line to Spaces from Cursor	ESC T
Clear Unprotected Line to Nulls from Cursor	ESC t
Clear Unprotected to End of Line with Spaces	ESC c O
Clear Unprotected to End of Line with Nulls	ESC c L
Clear Unprotected Line Foreground to Spaces	ESC c R
Clear Unprotected Line Foreground to Nulls	ESC c S
Clear Unprotected Column to Nulls	ESC c K
Clear Unprotected Column to Specific Character (char = character that replaces unprotected characters)	ESC c I char
Box Rectangle to Right of Cursor (See Table A-5) (Width = col. height = row)	ESC c N width height

CHAPTER 1
LINK MC3 and WYSE 60 COMMANDS

FUNCTION	LINK MC3 WYSE 60
Box Rectangle in 80-Column Page (See Table A-5) (char = character that replaces unprotected characters)	ESC c G line col
Box Rectangle in 132-Column Page (See Table A-5) (char = character that replaces unprotected characters)	ESC c G line ~ col
Clear Unprotected Rectangle in 80-Column Page (See Table A-5) (char = character that replaces unprotected characters)	ESC c F line col char
Clear Unprotected Rectangle in 132-Column Page (See Table A-5) (char = character that replaces unprotected characters)	ESC c F line ~ col char
Clear Entire Rectangle in 80-Column Page (See table A-5) (char = character that replaces unprotected characters)	ESC c H line col char
Clear Entire Rectangle in 132-Column Page (SeeTable A-5) (char = character that replaces unprotected characters)	ESC c H line ~ col char
SENDING DATA	
Begin Print/Send at Top of Page	ESC d *
Begin Print/Send at Top of Screen	ESC d &
Send Cursor Character	ESC M
Send Entire Cursor Line	ESC 6
Send Unprotected Line	ESC 4
Send Entire Page	ESC 7
Send Unprotected Page	ESC 5
Mark Block Beginning (Embed STX)	ESC 8
Mark Block End (Embed ETX)	ESC 9
Send Entire Block	ESC s
Send Unprotected Characters in Block	ESC S
PRINT FUNCTIONS	
Print Formatted Page	ESC P
Print Formatted Unprotected Page	ESC @
Print Unformatted Page	ESC p or ESC I
Auxiliary Print Mode Off	CTRL T
Auxiliary Print Mode On	CTRL R
Transparent Print Mode Off	CTRL T
Transparent Print Mode On	ESC d #
Secondary Receive Mode Off	ESC d SPACE
Secondary Receive Mode On	ESC d !
Bidirectional Mode Off	ESC d $
Bidirectional Mode On	ESC d %

CHAPTER 1
LINK MC3 and WYSE 60 COMMANDS

FUNCTION	LINK MC3 WYSE 60
CHARACTER SETS	
Select Primary Character Set	ESC c D
Select Secondary Character Set	ESC c E
Define Primary Character Set - bank = Font Bank (holds predefined character set) 0 Font bank 0 1 Font bank 1 2 Font bank 2 3 Font bank 3	ESC c B bank
Define Secondary Character Set (See above for bank value)	ESC c C bank
Automatic Font Loading Off	ESC e N
Automatic Font Loading On	ESC e O
Load Font Bank with Predefined Character Set (See above for bank value) set = Predefined Character Set @ Native mode A Multinational B Standard ASCII C Graphics 1 D PC equivalent E Graphics 2 F Graphics 3 G Standard ANSI ` 44-line native mode a 44-line mulitnational ` 44-line PC equivalent ` 44-line Standard ASCII ` 44-line Standard ANSI	ESC c @ bank set
Clear Font Bank (See above for bank value)	ESC c ? bank
Define and Load Character (See above for bank value) pp = 2-byte hex value of char. position bb = 32-byte char. string defining bit pattern of char.	ESC c A bank pp bb...bb CTRL Y

CHAPTER 1
LINK MC3 and WYSE 60 COMMANDS

FUNCTION	MC 3 Special Features
Set 80/132 Column	Esc e F
Set 80 column Only	Esc e G
Set 24 Row Mode	Esc e (
Set 25 Row Mode	Esc e)
Set 43 Row Mode	Esc e +
Character Attributes On	Esc e 1
Embedded Attributes On	Esc e 2
Line Attributes On	Esc e 3
Auto Font Load Off	Esc e N
Auto Font Load On	Esc e O
Single High/Wide Row	Esc G @
Single high/double Wide Row	Esc G A
double High/Wide Top	Esc G D
Double High/Wide Bottom	Esc G E
Next Display Page	Esc W c
Previous Display Page	Esc w B
Set Page (x)	Esc W (x) (ASCII 0,1,2 etc.)
Lock Primary Set to GL	Esc c D
Lock Secondary Set to GR	Esc c E
Define Primary Set as (x)	Esc c B (x) (Bank 0,1,2, or 3)
Define Secondary Set as (y)	Esc c C (x) (Bank 0,1,2, or 3)
Program A Font Location	Esc c A (bank) (chr) (sl0msb) (sl0lsb) ... CTRL Y
Load Location with Library Font	Esc c a (bank) (chr) (lib add)
Load A Superscript	Esc c b (bank) (chr) (lib add)
Load A Subscript	Esc c c (bank) (chr) (lib add)
Set Time	Esc c 8 hh mm

CHAPTER 1
LINK 125 and WYSE 50 COMMANDS

FUNCTION	LINK 125	WYSE 50
Send Term. I.D.	ESC sp	ESC sp
Unlock Keyboard	ESC "	ESC "
Lock Keyboard	ESC #	ESC #
Set Prot. Mode	ESC &	ESC &
Prot. Mode Off	ESC '	ESC '
Wrt Prot. Off (Std)	ESC (	ESC (
Wrt Prot. On (H.I.)	ESC)	ESC)
Clear All Nulls	ESC *	ESC *
Clear All Space	ESC +	ESC +
Clear All Prot. Spaces	ESC ,	ESC ,
Address Cursor P.R.C.	ESC -	ESC -
Clear Unprot. Code	ESC .	ESC .
Read Cursor P.R.C.	ESC /	ESC /
Clear All Tabs	ESC 0	ESC 0
Set Tab	ESC 1	ESC 1
Clear Tab	ESC 2	ESC 2
Send Line Unprot.	ESC 4	ESC 4
Send Page Unprot.	ESC 5	ESC 5
Send Line All	ESC 6	ESC 6
Send Page All	ESC 7	ESC 7
Write STX	ESC 8	ESC 8
Write ETX	ESC 9	ESC 9
Clear Unprot. Null	ESC :	ESC :
Clear Unprot. Space	ESC ;	ESC ;
Address Row, Column	ESC =	ESC =
Read Row, Column	ESC ?	ESC ?
Print Unprot.	ESC @	ESC @
Set Message Attr.	ESC A	ESC A
Set Block Mode	ESC B	ESC B
Set Conv. Mode	ESC C	ESC C
Set Half/Full	ESC D	ESC D
Insert Line	ESC E	ESC E
Load Message Line	ESC F	ESC F
Set Attributes	ESC G	ESC G
Set Graphics	ESC H	ESC H

CHAPTER 1
LINK 125 and WYSE 50 COMMANDS

FUNCTION	Link 125	Wyse 50
Back Tab	ESC I	ESC I
Page Back	ESC J	ESC J
Page Forward	ESC K	ESC K
Print Unformated	ESC L ESC p	ESC L ESC p
Send Character	ESC M	ESC M
Set No-Scroll	ESC N	ESC N
Reset No Scroll	ESC O	ESC O
Print All	ESC P	ESC P
Insert Character	ESC Q	ESC Q
Delete Line	ESC R	ESC R
Send Message Unprot.	ESC S	ESC S
Era Line Space	ESC T	ESC T
Monitor Mode On	ESC U	ESC U
Set Prot. Column	ESC V	ESC V
Delete Character	ESC W	ESC W
Monitor Mode Off	ESC X ESC u	ESC X ESC u
Era Pages Spaces	ESC Y	ESC Y
Activate Segment 0	ESC]	ESC]
Set Screen Features	ESC ^	ESC ^
Address 80/132 Col.	ESC a	ESC a
Read 80/132 Columns	ESC b	ESC b
Tab	ESC i	ESC i
Up Cursor w/Scroll	ESC j	ESC j
Local Edit	ESC k	ESC k
Duplex Edit/Lower Case	ESC l	ESC l
Insert Mode On	ESC q	ESC q
Insert Mode Off	ESC r	ESC r
Send Message All	ESC s	ESC s
Era Line Null	ESC t	ESC t
Set Screen Format	ESC x	ESC x
Era Page Nulls	ESC y	ESC y
Program Function Keys	ESC z	ESC z
Home	ESC {	ESC {

CHAPTER 1
LINK 125 and WYSE 50 COMMANDS

FUNCTION	Link 125	Wyse 50
Activate Segment 1	ESC }	ESC }
Keyclick On	ESC >	ESC >
Keyclick Off	ESC <	ESC <
Display User Line	ESC g	ESC g
Disable User Line	ESC h	ESC h
Select Termination Seq.	ESC 3	ESC 3
Select Print Term. Char.	ESC o	ESC o
Address Row	ESC m	ESC m
Address Column	ESC n	ESC n
Program Function Keys	ESC |	ESC |
Load Func. w/Default	ESC _	ESC _
Clear All Func. Keys	ESC \	ESC \
Load 26th Line	ESC f	ESC f
Bell	CTRL G	CTRL G
Backspace	CTRL H	CTRL H
Tab	CTRL I	CTRL I
Linefeed w/Scroll	CTRL J	CTRL J
Up Cursor No Scroll	CTRL K	CTRL K
Right Cursor	CTRL L	CTRL L
Return	CTRL M	CTRL M
Unlock Keyboard	CTRL N	CTRL N
Cursor Down No Scroll	CTRL V	CTRL V
Clear Unprot. Space	CTRL Z	CTRL Z
Escape Lead In	CTRL [	CTRL [
Home	CTRL ^	CTRL ^
New Line	CTRL	CTRL
Monitor Mode Enable	CTRL 1	CTRL 1
Monitor Mode Disable	CTRL 2	CTRL 2
Enable Transparent	CTRL X	CTRL X
Disable Transparent	CTRL T	CTRL T
Extension Print On	CTRL R	CTRL R
Extension Print Off	CTRL T	CTRL T
Down Arrow Key	CTRL J	CTRL J
Shift Down Arrow	CTRL V	CTRL V

CHAPTER 2
TVI 955/950 COMMANDS

FUNCTION	TVI 955	TVI 950
Monitor Mode On	ESC U	ESC U or CTRL 1
Monitor Mode Off	ESC u or ESC X	ESC u or ESC X or CTRL 2
Enable Transmission	CTRL Q	CTRL Q
Stop Transmission	CTRL S	CTRL S
Block Mode On	ESC B	ESC B
Local Mode On	ESC c	
Half Duplex Mode On	ESC D H	ESC D
Full Duplex Mode On	ESC D F	ESC D
Return to Previous Conversational Mode	ESC C	ESC C
Select 8 Data Bits	ESC [= 1 h	
Select 7 Data Bits	ESC [= 1 l	
Set MODEM Port Operating Parameters (Main Port) (See Table A-1)	ESC { p1 p2 p3 p4	
Set AUX Port Operating Parameters (Printer port) (See Table A-1)	ESC } p1 p2 p3 p4	
Select the Terminal's Handshaking Protocol	ESC [1 ; Ps v	
No protocol	ESC [1 ; 0 v	
X-On/X-Off	ESC [1 ; 1 v	
DTR	ESC [1 ; 2 v	
Both protocols	ESC [1 ; 3 v	
Select the Receive Buffer Fill Limit	ESC [2 ; Ps v	
Fill Limit 16 Bytes	ESC [2 ; 0 v	
Fill Limit 32 Bytes	ESC [2 ; 1 v	
Fill Limit 64 Bytes	ESC [2 ; 2 v	
Fill Limit 128 Bytes	ESC [2 ; 3 v	

CHAPTER 2
TVI 955/950 COMMANDS

FUNCTION	TVI 955	TVI 950
Set MODEM Port Handshaking	ESC [= 0 h	
Set AUX Port Handshaking (Transmission Control On)	ESC [= 0 l	
Enable DTR MODEM Port Handshaking (Disable X-On/X-Off)	CTRL N	CTRL N
Enable X-On/X-Off MODEM Port Handshaking	CTRL O	CTRL O
Send Terminal ID	ESC M	ESC M
Program Answerback Message (answer = Up to 20 characters to define answerback message)	ESC ^ (text) CTRL Y	
Execute a User-installed Program	ESC z	
Screen Refresh Rate is 60 Hz	ESC [= 16 l	
Screen Refresh Rate is 50 Hz	ESC [= 16 h	
Reset Terminal's Operating Values to Factory Default	ESC ~ 0	
Reset Terminal's Operating Values to Nonvolatile Memory Values	ESC ~ 1	
Run the Self Test	ESC V	
CONTROLLING THE TERMINAL AND KEYBOARD		
Local Edit Mode On	ESC k	ESC k
Duplex Edit Mode On	ESC l	ESC l
Sound Bell	CTRL G	CTRL G
Unlock Keyboard	ESC "	ESC "
Lock Keyboard	ESC #	ESC #
Lock (Disable) SET UP Key	ESC [= 11 l	
Unlock (Enable) SET UP Key	ESC [= 11 h	
Lock (Disable) ESC Key	ESC [= 12 l	
Unlock (Enable) ESC Key	ESC [= 12 h	
Lock (Disable) CLEAR SPACE Key	ESC [= 13 l	
Unlock (Enable) CLEAR SPACE Key	ESC [= 13 h	
Lock (Disable) BREAK Key	ESC [= 14 l	
Unlock (Enable) BREAK Key	ESC [= 14 h	

CHAPTER 2
TVI 955/950 COMMANDS

FUNCTION	TVI 955	TVI 950
Display Scrolls at 2 lines per second (slow)	ESC [6 ; 2 v	
Display Scrolls at 8 lines per second (fast)	ESC [6 ; 3 v	
Smooth Scrolling On	ESC 8	ESC 8
Smooth Scrolling Off	ESC 9	ESC 9
Set Cursor Display Features	ESC . Ps	ESC .
Cursor Display Off	ESC . 0	ESC .
Blinking Block Cursor	ESC . 1	
Steady Block Cursor	ESC . 2	
Blinking Underline Cursor	ESC . 3	
Steady Underline Cursor	ESC . 4	
Cursor Display On		ESC .
DISPLAYING THE MESSAGE FIELDS		
Load Text into User Message One (Automatically displayed in native mode. May be hidden by assigning blank attribute (ESC A11) text = 78 char. in 80 col. screen -- 130 char. in 132 screen	ESC f (text) CTRL M	ESC f
Turn On Unshifted Label Line	ESC g	ESC g
Turn Off Unshifted Label Line		ESC h
DEFINING THE DATA AREA		
Select 80-Column Display	ESC [= 3 l	
Select 132-Column Display	ESC [= 3 h	
DISPLAY MEMORY/SPLIT SCREEN		
Define Number of Lines on Each Page	ESC \ Ps	
Display Previous Page	ESC J	ESC J
Display Next Page	ESC K	ESC K
Display Page Pn (With 80 column only selected)	ESC [1 ; Pn }	
Define Scrolling Region	ESC [Pt ; Pb r	
Activate Upper Window		ESC]
Activate Lower Window		ESC [
DISPLAY ATTRIBUTES		
Assign Display Attribute to Status Line	ESC [3 ; Ps v	ESC \
Normal	ESC [3 ; 0 v	
Reverse	ESC [3 ; 1 v	
Normal Underline	ESC [3 ; 2 v	
Reverse Underline	ESC [3 ; 3 v	

CHAPTER 2
TVI 955/950 COMMANDS

FUNCTION	TVI 955	TVI 950
Assign Character Display Attribute (See Table B-4 for Ps value)	ESC G Ps	ESC G attr
Page Attribute mode On	ESC [= 2 h	
Line Attribute Mode On	ESC [= 2 l	
Nonhidden Attributes (Space)	ESC F 0	
Hidden Attributes (No Space)	ESC F 1	
Half Intensity Mode	ESC [= 5 h	
Full Intensity Mode	ESC [= 5 l	
PROTECTING DATA		
Write-Protect Mode Off	ESC (	ESC (
Write-Protect Mode On	ESC)	ESC)
Protect Mode Off	ESC '	ESC '
Protect Mode On	ESC &	ESC &
GRAPHICS CHARACTERS		
Select a Character Set	ESC [9 ; Ps v	
Graphics Mode On	ESC $	ESC $
Graphics Mode Off	ESC %	ESC %
Select a Character from the Multinational Set	CTRL U Ps	
Define Block Graphics Area	ESC H w h	
Enable Optional Graphics Firmware	ESC m	
CONTROLLING THE CURSOR		
Cursor Left (Backspace)	CTRL H ESC [Pn D	CTRL H
Cursor Right	CTRL L ESC [Pn C	CTRL L
Cursor Up; No Scroll	CTRL K ESC [Pn A	CTRL K
Cursor Up; Scroll (Reverse Linefeed)	ESC j	ESC j
Cursor Down; No Scroll	CTRL V ESC [Pn B	CTRL V
Cursor Down; Scroll (linefeed)	CTRL J	CTRL J
Cursor to Start of Line (Carriage Return)	CTRL M	CTRL M
Cursor to Start of Next Line (Lnfeed/Carr Rtn)	CTRL _	CTRL _
Home Cursor	ESC [H or CTRL ^	CTRL ^
End-of-Line Wrap Off	ESC [= 7 l	
End-of-Line Wrap On	ESC [= 7 h	
Received CR Mode Off	ESC [= 6 l	
Received CR Mode On	ESC [= 6 h	ESC w
Autopage Mode Off	ESC w	ESC v
Autopage Mode On	ESC v	ESC H
Autoscrolling Mode Off		ESC H
Autoscrolling Mode On		
Line Lock Mode On	ESC ! 1	

CHAPTER 2
TVI 955/950 COMMANDS

FUNCTION	TVI 955	TVI 950
Line Lock Mode Off	ESC ! 2	
Address (Send) Cursor to Page, Row, and Columns 1 through 80	ESC - p r c	
Address (Send) Cursor to Row & Columns 81 - 132 in Current Page	ESC = r ~ c	
Address Cursor in 80-Column Current Page (See Table A-5)	ESC = r c	ESC = line col
Address Cursor in Specific 80-Column Page (SeeTable A-5)		ESC -
Address Cursor in Specific 80-Column Window/page (See Table A-5) Wnd/page = Window or Page 0 Page 0 or upper window 1 Page 1 or lower window 2 Page 2 3 Page 3 4 Page 4 5 Page 5 6 Page 6	ESC - wnd/ page row col	
Address Cursor to Page, Row, and Columns 81 through 132	ESC - p r ~ c	ESC ^
Read Cursor's Row and Column Posifon	ESC ?	ESC ?
Read Cursor's Page, Row and Column Position	ESC /	ESC /
Address Cursor to Line and Cloumn of Current Page in Decimal Units	ESC [P1 ; Pc H ESC [P1 ; Pc f	
Read Cursor's Page, Line, and Column Position in Decimal Units	ESC [? 6 n	
Read Cursor's Line and Column Position in Decimal Units	ESC [6 n	
Read Cursor Address in 80/132-Column Page		ESC DEL
EDITING		
Clear All Tab Stops	ESC 3	ESC 3
Set Tab Stop	ESC 1	ESC 1
Clear Tab Stop	ESC 2	ESC 2
Tabulate Cursor	CTRL I	CTRL I
Backtab	ESC I	ESC I
Field Tab	ESC i	ESC i
Insert Mode On, Replace Mode Off	ESC q	ESC q
Insert Mode Off, Replace Mode On	ESC r	ESC r
Load a Replacement Character	ESC e Ps	
Enable Line Edit Mode	ESC O	
Enable Page Edit Mode	ESC N	

CHAPTER 2
TVI 955/950 COMMANDS

FUNCTION	TVI 955	TVI 950
Insert a Replacement Character at the Cursor Position	ESC Q	ESC Q
Insert Pn Replacement Characters Starting at the Cursor	ESC [Pn @	
Insert Line of Replacement Characters on the Current Line	ESC E	ESC E
Insert Pn Lines of Replacement Characters Starting at the Cursor Line	ESC [Pn L	
Delete Cursor Character	ESC W	ESC W
Delete Pn Characters Starting at the Cursor Position	ESC [Pn P	
Delete Cursor Line and Replace with Replacement Characters	ESC R	ESC R
Delete Pn Lines Starting at Cursor Line & Replace w/ Replacement Chars.	ESC [Pn M	
CLEARING DATA		
Clear Page to Nulls	ESC *	ESC *
Clear All to Replacement Characters Reset Protect & Write Protect Mode	ESC +	
Clear Unprotected to Write-Protected Space Characters (Reset Protect Mode)	ESC ,	
Clear Unprotected Characters and Replace	ESC ; or	ESC ; or
with Replacement Characters	CTRL Z	CTRL Z
Clear Unprotected Page to Protected Spaces		ESC ,
Clear Unprotected Characters and Replace with Null Characters	ESC :	ESC :
Erase from Cursor to End of Page; Replace with Replacement Characters	ESC Y	ESC Y
Erase from Cursor to End of Page; Replace with Null Characters	ESC y	ESC y
Erase Unprotected Characters in Page; Replace with Replacement Characters	ESC [Pn J	
Erase from Cursor to End of Line; Replace with Replacement Characters	ESC T	ESC T
Erase from Cursor to End of Line; Replace with Null Characters	ESC t	ESC t
Erase Unprotected Characters in Current line; Replace w/ Rep. Characters	ESC [Ps K	
Box Rectangle in 80-Column Page (See table A-5)	ESC H	

CHAPTER 2
TVI 955/950 COMMANDS

FUNCTION	TVI 955	TVI 950
Clear Current Unprotected Field and Replace with Replacement Characters. Return Cursor to Beginning of Field (Protect Mode on); or Clear Current Tab Field or Whole Line and Move Cursor to Beginning of Current Tab Field or Line (Protect Mode Off)	CTRL X	
SENDING DATA		
Send Entire Cursor Line	ESC 6	ESC 6
Send Unprotected Line	ESC 4	ESC 4
Send Entire Page	ESC 7	ESC 7
Send Unprotected Page	ESC 5	ESC 5
Send Whole Message Between Start of Text (STX) and End of Text (ETX)	ESC s	ESC s
Send the Answerback Message	CTRL E	
Display Status Line on Screen's Bottom Line	ESC h	
Select the Contents of the Top Information Line	ESC [4 ; Ps v	
Select the Contents of the Bottom Information Line	ESC [5 ; Ps v	
Load Text into User Message	ESC _ p1 p2 <text> CTRL M	
Send the Information Line Contents	ESC Z Ps	
Send Unprot. Message Between Start of Text (STX) and End of Text (ETX)	ESC S	ESC S
PRINT FUNCTIONS		
Page Print	ESC [0 ; Ps i	
Page Print Flip On	ESC [= 15 h	
Page Print Flip Off	ESC [= 15 l	
Define the Page Print Terminator	ESC p Ps	ESC p
Reprogram Delimiter Code	ESC x Ps p1 p2	ESC x
Print Formatted Page		ESC P
Print Formatted Unprotected Page	ESC P	ESC F
Print Unformatted Page	ESC L	ESC L
Print Page with Time		ESC L
Buffered Copy Print Mode Off	ESC A	ESC A
Buffered Copy Print Mode On	ESC @	ESC @
Buffered Transparent Print Mode Off	ESC a	ESC a
Buffered Transparent Print Mode On	ESC `	ESC `
Buffered Bidirectional Print Mode Off	CTRL T	CTRL T
Buffered Bidirectional Print Mode On	CTRL R	

CHAPTER 2
TVI 925/910 COMMANDS

FUNCTION	TVI 925	TVI 910
Send Term. I.D.	ESC M	ESC M
Unlock Keyboard	ESC "	ESC "
Lock Keyboard	ESC #	ESC #
Set Prot. Mode	ESC &	ESC &
Prot. Mode Off	ESC '	ESC '
Wrt Prot. Off (Std)	ESC (	ESC (
Wrt Prot. On (H.I.)	ESC)	ESC)
Clear All Nulls	ESC *	ESC *
Clear All Space		ESC +
Clear All Prot. Spaces	ESC ,	ESC ,
Address Cursor P.R.C.	ESC -	ESC -
Read Cursor P.R.C.	ESC /	ESC /
Clear All Tabs	ESC 3	ESC 3
Set Tab	ESC 1	ESC 1
Clear Tab	ESC 2	ESC 2
Send Line Unprot.	ESC 4	ESC 4
Send Page Unprot.	ESC 5	ESC 5
Send Line All	ESC 6	ESC 6
Send Page All	ESC 7	ESC 7
Clear Unprot. Null	ESC :	ESC :
Clear Unprot. Space	ESC + ESC ;	ESC ;
Address Row, Column	ESC =	ESC =
Read Row, Column	ESC ?	ESC ?
Print Unprot.	ESC F	ESC m
Set Block Mode	ESC B	ESC B
Set Conv. Mode	ESC C	ESC C
Set Half/Full	ESC D	ESC D
Insert Line	ESC E	ESC E
Set Attributes	ESC G	ESC G
Back Tab	ESC I	ESC I
Page Back	ESC J	ESC J
Page Forward	ESC K	ESC K
Print Unformated	ESC L	ESC L
Set No-Scroll	ESC H	ESC H
Reset No Scroll	ESC H	ESC H
Print All	ESC P	ESC P

CHAPTER 2
TVI 925/910 COMMANDS

FUNCTION	TVI 925	TVI 910
Insert Character	ESC Q	ESC Q
Delete Line	ESC R	ESC R
Send Message Unprot.	ESC S	ESC S
Era Line Space	ESC T	ESC T
Monitor Mode On	ESC U	ESC U
Delete Character	ESC W	ESC W
Monitor Mode Off	ESC X ESC u	ESC X ESC u
Era Pages Spaces	ESC Y	ESC Y
Activate Segment 0	ESC]	ESC }
Set Screen Features	ESC `	ESC ~
Address 80/132 Col.	ESC ^	ESC ^
Read 80/132 Columns	ESC DEL	ESC DEL
Tab	ESC i	ESC i
Up Cursor w/Scroll	ESC j	ESC j
Local Edit	ESC k	ESC k
Duplex Edit/Lower Case	ESC l	ESC l
Insert Mode On	ESC q	ESC q
Insert Mode Off	ESC r	ESC r
Send Message All	ESC s	ESC s
Era Line Null	ESC t	ESC t
Set Screen Format	ESC V	ESC !
Era Page Nulls	ESC y	ESC y
Program Function Keys	ESC z	ESC z
Activate Segment 1	ESC [	ESC {
Keyclick On	ESC >	ESC >
Keyclick Off	ESC <	ESC <
Reverse Screen	ESC b	ESC b
Normal Screen	ESC d	ESC d
Blank Screen	ESC o	ESC o
Normal Screen	ESC n	ESC n
Extension Print On	ESC @	ESC @
Extension Print Off	ESC A	ESC A
Transparent Print	ESC `	ESC `
Transparent Print Off	ESC a	ESC a
Display User Line	ESC g	ESC g

CHAPTER 2
TVI 925/910 COMMANDS

FUNCTION	TVI 925	TVI 910
Disable User Line	ESC h	ESC h
Select Termination Seq.	ESC x	ESC x
Select Cursor Attribute	ESC .	
Select Print Term. Char.	ESC p	ESC p
Address Row		ESC [
Address Column		ESC]
Cursor On/Off		ESC .
Display Control Char.		ESC F
Program Function Keys	ESC |	ESC |
Load Func. w/Default	ESC _	ESC _
Clear All Func. Keys	ESC \	ESC \
Graphic Mode Off	ESC %	ESC %
Graphic Mode On	ESC $	ESC $
Load 26th Line	ESC f	ESC f
Bell	CTRL G	CTRL G
Backspace	CTRL H	CTRL H
Tab	CTRL I	CTRL I
Linefeed w/Scroll	CTRL J	CTRL J
Up Cursor No Scroll	CTRL K	CTRL K
Right Cursor	CTRL L	CTRL L
Return	CTRL M	CTRL M
Cursor Down No Scroll	CTRL V	CTRL V
Clear Unprot. Space	CTRL Z	CTRL Z
Escape Lead In	CTRL [	CTRL [
Home	CTRL ^	CTRL ^
New Line	CTRL _	CTRL _
Enable Bi-Dir Aux.	CTRL R	
Disable Bi-Dir Aux.	CTRL T	
Enable Xon/Xoff	CTRL O	CTRL O
Disable Xon/Xoff	CTRL N	CTRL N
Monitor Mode Enable	CTRL 1	CTRL 1
Monitor Mode Disable	CTRL 2	CTRL 2
Enable Transparent		CTRL X
Disable Transparent		CTRL T
Down Arrow Key	CTRL V	
Shift Down Arrow	CTRL J	

CHAPTER 3
ADM 3A and ADDS VP/VP60 COMMANDS

FUNCTION	ADM3A	ADDS VP/VP60
Send Term. I.D.	ESC sp	ESC sp ESC ENQ
Unlock Keyboard	ESC "	ESC 6
Lock Keyboard	ESC #	ESC 5
Set Prot. Mode	ESC &	ESC &
Prot. Mode Off	ESC '	ESC '
Wrt Prot. Off (Std)	ESC (	
Wrt Prot. On (H.I.)	ESC)	
Clear All Nulls	ESC *	
Clear All Space	ESC +	ESC +
Clear All Prot. Spaces	ESC ,	ESC ,
Address Cursor P.R.C.	ESC -	ESC -
Clear Unprot. Code	ESC .	ESC.
Read Cursor P.R.C.	ESC /	ESC /
Clear All Tabs	ESC 0	
Set Tab	ESC 1	
Clear Tab	ESC 2	
Send Line Unprot.	ESC 4	
Send Page Unprot.	ESC 5	
Send Line All	ESC 6	
Send Page All	ESC 7	ESC 7 ESC DC1
Write STX	ESC 8	ESC 8
Write ETX	ESC 9	ESC 9
Clear Unprot. Null	ESC :	ESC :
Clear Unprot. Space	ESC;	ESC ; ESC G
Address Row, Column	ESC =	ESC Y
Read Row, Column	ESC?	ESC ?
Print Unprot.	ESC @	ESC @
Set Message Attr.	ESC A	ESC X ESC A
Set Block Mode	ESC B	
Set Conv. Mode	ESC C	ESC C
Set Half/Full	ESC D	
Insert Line	ESC E	ESC M
Load Message Line	ESC F	
Set Attributes	ESC G	ESC 0
Set Graphics	ESC H	ESC H
Back Tab	ESC I	ESC O ESC I
Page Back	ESC J	ESC < ESC J
Page Forward	ESC K	ESC >

CHAPTER 3
ADM 3A and ADDS VP/VP60 COMMANDS

FUNCTION	ADM3A	ADDS VP/VP60
Print Unformated	ESC L ESC p	ESC L ESC p
Send Character	ESC M	
Set No-Scroll	ESC N	
Reset No Scroll	ESC O	
Print All	ESC P	ESC P ESC x
Insert Character	ESC Q	ESC Q
Delete Line	ESC R	ESC I
Send Message Unprot.	ESC S	
Era Line Space	ESC T	ESC K
Monitor Mode On	ESC U	
Set Prot. Column	ESC V	
Delete Character	ESC W	ESC W ESC E
Monitor Mode Off	ESC X ESC u	
Era Pages Spaces	ESC Y	ESC k
Activate Segment 0	ESC]	ESC]
Set Screen Features	ESC `	ESC `
Address 80/132 Col.	ESC a	ESC a ESC Y [
Read 80/132 Columns	ESC b	ESC #
Tab	ESC i	
Up Cursor w/Scroll	ESC j	
Local Edit	ESC k	
Duplex Edit/Lower Case	ESC l	
Insert Mode On	ESC q	ESC F
Insert Mode Off	ESC r	ESC f
Send Message All	ESC s	ESC s
Era Line Null	ESC t	
Set Screen Format	ESC x	ESC "
Era Page Nulls	ESC y	ESC y
Program Function Keys	ESC z	ESC z
Home	ESC {	ESC {
Activate Segment 1	ESC }	ESC }
Keyclick On	ESC >	
Keyclick Off	ESC <	
Blank Screen		ESC D
Normal Screen		ESC d
Transparent Print		ESC 3
Transparent Print Off		ESC 4
Display User Line	ESC g	ESC b
Disable User Line	ESC h	ESC B
Select Termination Seq.	ESC 3	

CHAPTER 3
ADM 3A and ADDS VP/VP60 COMMANDS

FUNCTION	ADM3A	ADDS VP/VP60
Select Print Term. Char.	ESC o	
Address Row	ESC m	
Address Column	ESC n	
Display Control Char.		ESC Z
Set Wrt. Prot. Attribute		ESC 0
Home Lower Left		ESC r
Program Function Keys	ESC |	ESC |
Load Func. w/Default	ESC	ESC
Clear All Func. Keys	ESC \	ESC \
Graphic Mode Off		ESC 2
Graphic Mode On		ESC 1
Load 26th Line	ESC f	ESC $
Bell	CTRL G	CTRL G
Backspace	CTRL H	CTRL H
Tab	CTRL I	CTRL I
Linefeed w/Scroll	CTRL J	CTRL J
Up Cursor No Scroll	CTRL K	CTRL Z
Right Cursor	CTRL L	CTRL F
Return	CTRL M	CTRL M
Lock Keyboard	CTRL O	CTRL D
Unlock Keyboard	CTRL N	CTRL B
Cursor Down No Scroll	CTRL V	
Clear Unprot. Space	CTRL Z	
Escape Lead In	CTRL [	CTRL [
Home	CTRL ^	CTRL A
New Line	CTRL _	CTRL _
Enable Bi-Dir Aux.	CTRL N	
Disable Bi-Dir Aux.	CTRL O	
Monitor Mode Enable	CTRL 1	CTRL 1
Monitor Mode Disable	CTRL 2	CTRL 2
Enable Transparent	CTRL X	
Disable Transparent	CTRL T	CTRL T
Set 8th Bit (Wr Prot)		CTRL N
Reset 8th Bit (Wr Prot)		CTRL O
Cursor Back		CTRL U
Address Column		CTRL P
Address Row		CTRL K
Extension Print On	CTRL R	CTRL R
Extension Print Off	CTRL T	CTRL T
Down Arrow Key	CTRL J	
Shift Down Arrow	CTRL V	
Cursor On		CTRL X
Cursor Off		CTRL W
Clear All Spaces		CTRL L

CHAPTER 4
ANSI COMMANDS

VT 52	FUNCTION
ESC A	Cursor Up
ESC B	Cursor Down
ESC C	Cursor Right
ESC D	Cursor Left
ESC H	Cursor Home
ESC I	Reverse Line Feed
ESC Y (row column)	Direct Cursor Address
ESC F	Enter Graphics Mode
ESC G	Exit Graphics Mode
ESC J	Erase to End of Screen
ESC K	Erase to End of Line
ESC Z	Identify Terminal
ESC =	Enter Alternate Keypad Mode
ESC >	Exit Alternate Keypad Mode
ESC <	Enter ANSI Mode
ESC ^	Enter Auto Print Mode
ESC _	Exit Auto Print Mode
ESC W	Enter Printer Controller Mode
ESC X	Exit Printer Controller Mode
ESC]	Print Screen
ESC V	Print Cursor Line

VT100 CURSOR MOVEMENT COMMANDS	FUNCTION
ESC [Pn A	Cursor up Pn lines
ESC [Pn B	Cursor down Pn lines
ESC [Pn C	Cursor forward (right) Pn characters
ESC [Pn D	Cursor backward (left) Pn characters
ESC [Pl; Pc H or	Direct cursor addressing (Pl is line
ESC [Pl; Pc f	number, Pc is column number)
ESC D	Index
ESC M	Reverse index
ESC 7	Save cursor and attributes
ESC 8	Restore cursor and attributes
Line Size (Double-Height and Double-width) Commands	
ESC #3	Change this line to double-height top half
ESC #4	Change this line to double-height bottom half
ESC #5	Change this line to single-width single-height
ESC #6	Change this line to double-width single-height

Character Attributes

ESC [Ps;Ps;Ps;...;Ps m Ps refers to a selective parameter. Multiple parameters are separated by the semicolon character. The parameters are executed in order and have the following meanings:

VT100 CHARACTER ATTRIBUTES	
0 or None	All attributes off
1	Bold on
4	Underscore on
5	Blink on
7	Reverse video on

Any other parameter values are ignored.

Erasing	
ESC [K or ESC [0K	From cursor to end of line
ESC [1 K	From beginning of line to cursor
ESC [2 K	Entire line containing cursor
ESC [J or ESC [0J	From cursor to end of screen
ESC [1 J	From beginning of screen to cursor
ESC [2 J	Entire screen

Character Sets (G0 and G1 Designators)

G0 designator	G1 designator	Character set
ESC (A	ESC) A	United kingdom (UK)
ESC (B	ESC) B	United States (USASCII)
ESC (0	ESC) 0	Special graphics characters and line drawing set

The G1 set is invoked for use by the control code SO (Shift Out), the G0 set is invoked by the control code SI (Shift In).

Scrolling Region

ESC [Pt; Pb r Pt is the number of the top line of the scrolling region; Pb is the number of the bottom line of the scrolling region and must be greater than Pt.

Tab Stops	
ESC H	Set tab at current column
ESC [g or ESC [0 g	Clear tab at current column
ESC [3 g	Clear all tabs

Mode Name	Mode	To Set Seq.	Mode	To Reset Seq.
Line feed/new line	New line	ESC [20h	Line feed	ESC [20l
Cursor key mode	Application	ESC [?1h	Cursor	ESC [?1l
ANSI/VT52 mode	ANSI	N/A	VT52	ESC [?2l
Column mode	132 Col	ESC [?3h	80 Col	ESC [?3l
Scrolling mode	Smooth	ESC [?4h	Jump	ESC [?4l
Screen mode	Reverse	ESC [?5h	Normal	ESC [?5l
origin mode	Relative	ESC [?6h	Absolute	ESC [?6l
Wraparound	On	ESC [?7h	Off	ESC [?7l
Auto repeat	On	ESC [?8h	Off	ESC [?8l
Keypad mode	Application	ESC =	Numeric	ESC >

Report	Invoked by	Response is
Cursor Position	ESC [6 n	ESC [Pl ; Pc R (Pl = line number and Pc = column number)
What Are You	ESC [c or ESC [0 c	ESC [?1; Ps c

Ps is the "option present" parameter with the following meanings:

Ps	Meaning
0	Base VT100, no options
1	Processor option (STP)
2	Advanced video option (AVO)
3	AVO and STP
4	Graphics processor option (GO)
5	GO and STP
6	GO and AVO
7	GO, STP and AVO

Alternately invoked by ESC Z (not recommended). Response is the same.

Reset

ESC c — Reset causes the power-up reset routine to be executed.

CHAPTER 4
ANSI COMMANDS

VT 220 STANDARD EMULATION FUNCTIONAL MODE	SEQUENCE
Guarded Area Transmit Off	csi 1 h
Guarded Area Transmit On	csi 1 l
Lock Keyboard	csi 2 h
Unlock Keyboard	csi 2 l
Insert Mode	csi 4 h
Replace Mode	csi 4 l
Send Mode	csi 12 h
Receive Mode	csi 12 l
Auto Page Mode On	csi 19 h
Auto Page Mode Off	csi 19 l
New Line Mode	csi 20 h
Line Feed Mode	csi 20 l
25th Data Line On	csi 40 h
25th Data Line Off	csi 40 l
Application Cursor Keys	csi ? 1 h
Normal Cursor Keys	csi ? 1 l
VT 52 Mode On	csi ? 2 l
132 Column Mode	csi ? 3 h
80 Column Mode	csi ? 3 l
Smooth Scroll Mode	csi ? 4 h
Jump Scroll Mode	csi ? 4 l
Reverse Video Display	csi ? 5 h
Normal Video Display	csi ? 5 l
Origin Mode Set (cursor only within scroll region)	csi ? 6 h
Origin Mode Reset (cursor outside scroll region)	csi ? 6 l
Auto Wrap On	csi ? 7 h
Auto Wrap Off	csi ? 7 l
Auto Repeat On	csi ? 8 h
Auto Repeat Off	csi ? 8 l
Full Duplex Mode	csi ? 10 h
Block Mode	csi ? 10 l
Line Transmit Mode On	csi? 11 h
Line Transmit Mode Off	csi ? 11 l
Caps Lock On	csi ? 12 h
Caps Lock Off	csi ? 12 l
Space Compression On	csi ? 13 h
Space Compression Off	csi ? 13 l
Edit Keys Remote	csi ? 16 h
Edit Keys Local	csi ? 16 l
Printer Formfeed On (formfeed follows print screen)	csi ? 18 h
Printer Formfeed Off (nothing follows print screen)	csi ? 18 l
Print Extent Mode On (print entire screen)	csi ? 19 h
Print Extent Mode Off (print scroll region only)	csi ? 19 l
Enable Cursor	csi ? 25 h
Disable Cursor	csi ? 25 l

CHAPTER 4
ANSI COMMANDS

VT220 CURSOR AND EDITING COMMANDS	SEQUENCE	DESCRIPTION
Cursor Up	csi (pn) A	
Cursor Down	csi (pn) B	
Cursor Forward	csi (pn) C	
Cursor Backward	csi (pn) D	
Cursor Horizontal Absolute	csi (pn) G	
Cursor Position Absolute	csi (row); (column) H	
Cursor Position Report	csi (row); (column) R	
Index	ind or esc D	
Reverse Index	ri or esc M	
Next Line	nel or esc E	
Vertical Position Absolute	csi (pn) d	
Horizontal and Vertical Positioning	csi (row); (column) H or f	
Horizontal Tab Set	hts or esc H	
Tab Clear	csi g csi 0 g csi 3 g	
Delete Character	csi (pn) P	
Delete Line	csi (pn) M	
Erase In Display	csi J	cursor to end of screen
	csi 0 J	cursor to end of screen
	csi 1 J	beginning of screen to cursor
	csi 2 J	complete display
Insert Character	csi (pn) @	
Insert Line	csi (pn) L	
Erase In Line	csi K	cursor to end of line
	csi 0 K	cursor to end of line
	csi 1 K	beginning of line to cursor
	csi 2 K	complete line
Erase Character	csi (pn) X	
Selective Erase In Display (erasable characters only)	csi ? J	cursor to end of screen
	csi ? 0 J	cursor to end of screen
	csi ? 1 J	beginning of screen to cursor
	csi ? 2 J	complete display
Selective Erase In Line (erasable characters only)	csi ? K	cursor to end of line
	csi ? 0 K	cursor to end of line
	csi ? 1 K	beginning of line to cursor
	csi ? 2 K	complete line
Set Protect Attribute	csi (pn) "	
Next Page	csi U	
Previous Page	csi V	
Send Screen	esc S	

OTHER VT 220 COMMANDS	SEQUENCE	DESCRIPTION
Alignment Display	esc # 8	
Select Graphic Rendition	csi (pn) m	
	csi 0 m	primary (per setup)
	csi 1 m	bold
	csi 4 m	underscore
	csi 5 m	blink
	csi 6 m	blank
	csi 7 m	reverse image
	csi 22 m	normal image
	csi 24 m	not underlined
	csi 25 m	not blinking
	csi 26 m	not blank
	csi 27 m	positive image
Select Character Attributes	csi (pn) " q	
	csi 0 " q	all attributes off
	csi 1 " q	non-erasable
	csi 2 " q	erasable
Set Top and Bottom Margins	csi (row); (column) r	
Single Wide Line	esc # 5	
Double Wide Line	esc # 6	
Double High Line Top	esc # 3	
Double High Line Bottom	esc # 4	
Address 26th Line	csi (column) p (text) st	
Reset Terminal	esc c	
Save Cursor	esc 7	
Restore Cursor	esc 8	
Identify Terminal	esc Z	
Compatibility Level	csi 6 2 ; (pn) " P	
Device Attributes	csi 0 c	
Print Cursor Line	csi ? 1 i	
Auto Print Mode On	csi ? 5 i	
Auto Print Mode Off	csi ? 4 i	
Printer Controller On	csi 5 i	
Printer Controller Off	csi 4 i	
Print Screen	csi 0 i	

CHAPTER 5
PCTerm COMMANDS

When PC Term key handling is selected and the terminal is in the PC Term emulation mode, function keys and shifted function keys will generate the following codes unless programmed otherwise. These codes shall be reloaded when either the unique setup or keyboard setup operations are invoked.

KEY	CODE
F1	SOH @ CR
F2	SOH A CR
F3	SOH B CR
F4	SOH C CR
F5	SOH D CR
F6	SOH E CR
F7	SOH F CR
F8	SOH G CR
F9	SOH H CR
F10	SOH I CR
F11	
F12	
SHIFT F1	SOH ' CR
SHIFT F2	SOH a CR
SHIFT F3	SOH b CR
SHIFT F4	SOH c CR
SHIFT F5	SOH d CR
SHIFT F6	SOH e CR
SHIFT F7	SOH f CR
SHIFT F8	SOH g CR
SHIFT F9	SOH h CR
SHIFT F10	SOH I CR
SHIFT F11	
SHIFT F12	

Refer to 925 sequences for other than these special codes.

PCTerm Special Escape Sequences

ESC ~ Enables auto newline. When a character is written in column 80, the cursor automatically is positioned at the beginning of a new line.

ESC 0 Disables auto newline. When a character is written in column 80, the cursor is not positioned at the beginning of a new line.

ESC [Transmit keyboard status. Two bytes of data are sent to the host. The first byte is formed by the following status conditions:

Bit #	Bit = 1 Condition
Bit 0	Caps Lock on
Bit 1	X (always 0)
Bit 2	X
Bit 3	X
Bit 4	Alt key held down
Bit 5	Control key held down
Bit 6	Num Lock on
Bit 7	Shift key held down

The second byte is always a 61 hex (a).

ESC } Set full duplex communications

ESC { Set half duplex communications

ESC O Turn off video display

ESC N Turn on video display

ESC px Select printer termination character. This character is sent to the printer at the end of a page print operation, where x = termination character sent.

**ESC CTRL ** Resets terminal as though just powered on.

ESC CTRL ^ Set conversation mode.

ESC CTRL _ Set local mode. No further data is transmitted and received data is ignored while in this mode.

ESC L	Print all unprotected data between home and cursor position. Protected data is sent to the printer port as spaces.
ESC F	Fill screen display with all H characters.
ESC Z	Turn on insert mode. This causes all entered data to be inserted at the cursor location with all following data moved right. Data moved past column 80 or 132 is lost.
ESC r	Turn off insert mode.
ESC o	Set margin bell. This causes a bell tone whenever the cursor is advanced past this column.
ESC n	Turns off margin bell.
ESC]	Program answerback. Subsequent 32 characters are programmed into the answerback message unless terminated sooner with a CR. This message is stored in non-volatile memory until changed, and is transmitted to the host upon receipt of a CTRL E (ENQ) character.
ESC m	Default set up parameters. Auto newline is set to off and main port handshake is set to both. All other parameters remain as saved.
ESC c	The emulation is forced to TVI 925 25L and ASCII characters.
ESC 8	Auto linefeed on.
ESC 9	Auto linefeed off.

APPENDIX A

P1=baud	MODEM port	AUX port
0	38400	19200
1	19200	9600
2	9600	7200
3	4800	4800
4	2400	3600
5	2000	2400
6	1800	2000
7	1200	1800
8	600	1200
9	300	600
:	150	300
;	134.5	150
<	110	134.5
=	75	110
>	50	

P2=stop	Stop Bits
0	1
1	2

P3=parity	Parity Bit
0	None
1	Odd
2	Mark
3	Even

P4=word	Data Word
0	7 bits
1	8 bits

Table A-1

APPENDIX A

Programming Function Keys

ESC z *(fkey value code from table A-2)*
"message" DEL

Key	Unshifted	Shifted
F1	@	`
F2	A	a
F3	B	b
F4	C	c
F5	D	d
F6	E	e
F7	F	f
F8	G	g
F9	H	h
F10	I	i
F11	J	j
F12	K	k
F13	L	l
F14	M	m
F15	N	n
F16	O	o

Table A-2

APPENDIX A

Function Key Label Line Programming

ESC z *(field from table A-3)* '"'message"
DEL *(or CR)*

Function Key	Field		Function Key	Field	
	Unshifted	Shifted		Unshifted	Shifted
F1	0	P	F9	8	X
F2	1	Q	F10	9	Y
F3	2	R	F11	:	Z
F4	3	S	F12	;	[
F5	4	T	F13	<	\
F6	5	U	F14	=	]
F7	6	V	F15	>	^
F8	7	W	F16	?	_

Table A-3
Label Code Field Values

APPENDIX A

attr	Display Attributes
SPACE	Space character
0	Normal
1	Invisible
2	Blink
3	Invisible
4	Reverse
5	Reverse and invisible
6	Reverse and blink
7	Reverse, blink, invisible
8	Underline
9	Underline and invisible
:	Underline and blink
;	Underline, blink, invisible
<	Underline and reverse
=	Underline, reverse, invisible
>	Underline, reverse, blink
?	Underline, reverse, blink, invisible
P	Dim
q	Dim and invisible
r	Dim and blink
s	Dim, blink, invisible
t	Dim and reverse
u	Dim, reverse, invisible
v	Dim, reverse, blink
w	Dim, reverse, blink, invisible
x	Dim and underline
y	Dim, underline, invisible
z	Dim, underline, blink
{	Dim, underline, blink, invisible
|	Dim, underline, reverse
}	Dim, underline, reverse, invisible
-	Dim, underline, reverse, blink
DEL	Dim, underline, reverse, blink, invisible

Table A-4

APPENDIX A

Row/ Col.	ASCII Code	Row/ Col.	ASCII Code	Row/ Col.	ASCII Code
1	space	33	@	65	`
2	!	34	A	66	a
3	"	35	B	67	b
4	#	36	C	68	c
5	$	37	D	69	d
6	%	38	E	70	e
7	&	39	F	71	f
8	'	40	G	72	g
9	(	41	H	73	h
10	)	42	I	74	I
11	*	43	J	75	j
12	+	44	K	76	k
13	,	45	L	77	l
14	-	46	M	78	m
15	.	47	N	79	n
16	/	48	O	80	o
17	0	49	P	81	p
18	1	50	Q	82	q
19	2	51	R	83	r
20	3	52	S	84	s
21	4	53	T	85	t
22	5	54	U	86	u
23	6	55	V	87	v
24	7	56	W	88	w
25	8	57	X	89	x
26	9	58	Y	90	y
27	:	59	Z	91	z
28	;	60	[	92	{
29	<	61	\	93	|
30	=	62	]	94	}
31	>	63	^	95	~
32	?	64	_	96	DEL/RUB

Table A-5
Cursor Addressing Coordinates

APPENDIX A

key	ASCII Keyboard	ANSI Keyboard	Enhanced PC-Style Keyboard
SPACE	ESC	ESC	ESC
%	SHIFT ESC	SHIFT ESC	SHIFT ESC
I	TAB	TAB	TAB →
&	SHIFT TAB	SHIFT TAB	SHIFT TAB →
*	BACKSPACE	BACKSPACE	← BACKSPACE
'	SHIFT BACKSPACE	SHIFT BACKSPACE	SHIFT ← BACKSPACE
#	DEL	BLOCK	
(	SHIFT DEL	LOCAL	
$	RETURN	RETURN	ENTER
)	SHIFT RETURN	SHIFT RETURN	SHIFT ENTER
*	HOME	HOME	HOME
/	SHIFT HOME	SHIFT HOME	SHIFT HOME
+			
0	SHIFT ▲	SHIFT ▲	SHIFT ↑
,			
1	SHIFT ▼	SHIFT ▼	SHIFT ↓
-			
2	SHIFT ◀	SHIFT ◀	SHIFT ←
.			
3	SHIFT ▶	SHIFT ▶	SHIFT →
s	ENTER	ENTER	ENTER *kpd*
4	SHIFT ENTER	SHIFT ENTER	SHIFT ENTER *kpd*
q	INS CHAR	PF1	INSERT
p	INS LINE	SHIFT PF1	SHIFT INSERT
r	PAGE NEXT	LINE FEED	PAGE DOWN
w	PAGE PREV	SHIFT LINE FEED	SHIFT PAGE DOWN
u	SEND	DELETE	
t	PRINT	SHIFT DELETE	
}	CLR LINE	PF3	
z	CLR SCRN	SHIFT PF3	
5	DEL CHAR	PF2	DELETE
6	DEL LINE	SHIFT PF2	SHIFT DELETE
7	REPL	PF4	
8	INS	SHIFT PF4	
R			PRINT SCREEN
X			SHIFT PRINT SCREEN
\			END
]			SHIFT END
:			PAGE UP
;			SHIFT PAGE UP

Table A-6

APPENDIX A

Function Key Defaults

The terminal's cursor (arrow) and function keys (F1-F32) are user programmable. The keys are pre-programmed with default values for various emulations as listed in table A-7 below. These values will be in effect unless the keys are reprogrammed and the new definitions saved in non-volatile memory. All emulations except TVI 955, VT modes and PCTerm use the default values in table A-7.

Key	Function			
	Unshifted	ADDS VP	Shifted	ADDS VP
F1	SOH@CR	STX1CR	SOH`CR	STX!CR
F2	SOHACR	STX2CR	SOHaCR	STX"CR
F3	SOHBCR	STX3CR	SOHbCR	STX#CR
F4	SOHCCR	STX4CR	SOHcCR	STX$CR
F5	SOHDCR	STX5CR	SOHdCR	STX%CR
F6	SOHECR	STX6CR	SOHeCR	STX&CR
F7	SOHFCR	STX7CR	SOHfCR	STX'CR
F8	SOHGCR	STX8CR	SOHgCR	STX(CR
F9	SOHHCR	STX9CR	SOHhCR	STX)CR
F10	SOHICR	STX:CR	SOHiCr	STX*CR
F11	SOHJCR	STX;CR	SOHjCR	STX+CR
F12	SOHKCR	STX<CR	SOHkCR	STX,CR
F13	SOHLCR	STX=CR	SOHlCR	STX-CR
F14	SOHMCR	STX>CR	SOHmCR	STX.CR
F15	SOHNCR	STX?CR	SOHnCR	STX/CR
F16	SOHOCR	STX@CR	SOHoCR	STX0CR
↑	CTRLK	CTRLZ	ESCj	CTRLZ
↓	CTRLJ	CTRLJ	CTRLV	CTRLJ
→	CTRLL	CTRLF	CTRLL	CTRLF
←	CTRLH	CTRLU	CTRLH	CTRLU

Table A-7

APPENDIX B

Cursor and Function Key Programming
From the host computer or the keyboard
(Do not use quotes or spaces between values)

ESC | p1 p2 "message" CTRL Y

Key	Unshifted	Shifted
F1	1	A
F2	2	B
F3	3	C
F4	4	D
F5	5	E
F6	6	F
F7	7	G
F8	8	H
F9	9	I
F10	:	J
F11	;	K
F12	<	L
F13	=	M
F14	>	N
F15	?	O
F16	@	P
▲	-	)
▼	.	*
►	0	'
◄	/	+

Table B-1
Values for p1

1 = send to the computer (full duplex)
2 = send to the screen (local)
3 = send to the computer and to the screen (half duplex)
4 = send to printer only
5 = send to printer and computer only
6 = send to printer and screen only
7 = send to printer, computer and screen

Function Key Output Definitions
Values For p2

APPENDIX B

Display Field Attributes

Attributes may be assigned to the Function Key Label Line, the Local Message Field and the Host Message Field, as well as the screen.

ESC A ***(code from Table B-2) (code from table B-3)***

Display Field	Code
Screen Display	0
Function Key Label Line	1
Local Message Field	2
Host Message Field	3

Table B-2

Attribute	Code
Blank	1
Blink	2
Half Intensity	P
Normal	0
Reverse Video	4
Underline	8

Table B-3

Set Screen Features
ESC G *(attribute value from table B-4)*

Attribute	Escape Sequence PC Term
Normal video (default)	ESC G0 ESC G0
Blank	ESC G1 ESC G1
Blink	ESC G2 ESC G2
Blank blink	ESC G3 ESC G3
Reverse video (default reverse)	ESC G4 ESC G4
Blank/reverse	ESC G5 ESC G5
Reverse and blink	ESC G6 ESC G6
Blank/reverse and blink	ESC G7 ESC G7
Underline	ESC G8 ESC G8
Underline and blank	ESC G9 ESC G9
Blink/underline	ESC G: ESC G:
Reverse and underline	ESC G< ESC G<
Blank/reverse and underline	ESC G= ESC G=
Reverse and underline and blink	ESC G> ESC G>
Blank reverse and underline and blink	ESC G? ESC G?
Half Intensity	ESC Gp ESC G@
Half Intensity and blank	ESC Gq ESC GA
Half Intensity and blink	ESC Gr ESC GB
Half Intensity and blank and blink	ESC Gs ESC GC
Half Intensity and reverse	ESC Gt ESC GD
Half Intensity, reverse and blank	ESC Gu ESC GE
Half Intensity, reverse and blink	ESC Gv ESC GF
Half Intensity, reverse and blank	ESC Gw ESC GG
Half Intensity and underline	ESC Gx ESC GH
Half Intensity, underline and blank	ESC Gy ESC GI
Half Intensity, underline and blink	ESc Gz ESc GJ
Half Intensity, underline, blink and blank	ESC G{ ESC GK
Half Intensity, underline and reverse	ESC G| ESC GL
Half Intensity, underline, reverse and blank	ESC G} ESC GM
Half Intensity, underline, reverse and blink	ESC G~ ESC GN
Half Intensity, underline, reverse, blink and blank	ESC O

Table B-4
Attribute Values

APPENDIX C

Selecting the Function Key Set

SET UP
DEFAULT Ps = 0
ESC [7 ; Ps v

Select function key set

Ps	Set
0	One
1	Two

This command determines the current function key set.

Reprogramming Function Keys

KEY	950-Compatible p1		955-Compatible p1	
	Unshifted	Shifted	Unshifted	Shifted
F1	1	<	1	A
F2	2	=	2	B
F3	3	>	3	C
F4	4	?	4	D
F5	5	@	5	E
F6	6	A	6	F
F7	7	B	7	G
F8	8	C	8	H
F9	9	D	9	I
F10	:	E	:	J
F11	;	F	;	K
F12	G	L	<	L
F13	H	M	=	M
F14	I	N	>	N
F15	J	O	?	O
F16	K	P	@	P

Table C-1

P1	Both Modes
< space>	Clear entire current function key set memory
0	Load function keys in sequence from F1

P2	Message Destination
1	Send message to computer
2	Send message to terminal
3	Send message to both computer and terminal

APPENDIX D

ADDS Viewpoint/ Viewpoint 60

In Adds Viewpoint/Viewpoint 60 emulation, attributes are set by positioning the cursor at the start of the field to be highlighted and then entering **CTRL N.** Define the area to be highlighted and enter **CTRL O.** Now enter **ESC 0** followed by the character from table D-1 for the attribute selected.

Attribute	Escape Sequence
*Normal	ESC @
*Half intensity	ESC A
Blinking	ESC B
Half intensity blinking	ESC C
*Reverse video	ESC P
*Reverse video, half intensity	ESC Q
Reverse video, blinking	ESC R
Reverse video, half intensity, blinking	ESC S
Underline	ESC `
Underlined, half intensity	ESC a
Underline, blinking	ESC b
Underlined, half intensity, blinking	ESC c
Video Suppress	ESC D

Table D-1

APPENDIX D

Effect	ADDS Native	PC Term
Upper left corner	@ 40 HEX	F 46 HEX
Upper right corner	D 44 HEX	G 47 HEX
Lower left corner	H 48 HEX	H 48 HEX
Lower right corner	L 4C HEX	E 45 HEX
Tee	P 50 HEX	N 4E HEX
Tee pointing left	T 54 HEX	L 4C HEX
Tee pointing right	X 58 HEX	M 4D HEX
Tee pointing up	\ 5C HEX	o 6F HEX
Horizontal line	` 60 HEX	K 4B HEX
Vertical line	d 64 HEX	J 4A HEX
Cross	h 68 HEX	I 49 HEX
Filled in square	l 6C HEX	P 50 HEX
Checkerboard square	r 72 HEX	] 5D HEX
Horizontal parallel lines	w 77 HEX	\ 5C HEX
Vertical parallel lines	y 79 HEX	^ 5E HEX
Checkerboard square, large checks	_	- 5F HEX

GRAPHIC MODE CHARACTERS
Table D-2

APPENDIX D

VERTICAL CURSOR ADDRESSING

The following table specifies the cursor addressing to be used to determine the row (vertical) position desired. Only values for 24 rows are supported. The top row of the screen is ROW NO. 1.

ROW NO.	ASCII CODE
1	CTRL @
2	CTRL A
3	CTRL B
4	CTRL C
5	CTRL D
6	CTRL E
7	CTRL F
8	CTRL G
9	CTRL H
10	CTRL I
11	CTRL J
12	CTRL K
13	CTRL L
14	CTRL M
15	CTRL N
16	CTRL O
17	CTRL P
18	CTRL Q
19	CTRL R
20	CTRL S
21	CTRL T
22	CTRL U
23	CTRL V
24	CTRL W

APPENDIX D

HORIZONTAL CURSOR ADDRESSING

The following table specifies the cursor addressing to be used to determine the column (horizontal) position desired. Only values for 80 columns are supported. The leftmost column is COLUMN NO. 1.

COLUMN NO.	ASCII CODE	COLUMN NO.	ASCII CODE	COLUMN NO.	ASCII CODE
1	CTRL @	28	'	55	T
2	CTRL A	29	(	56	U
3	CTRL B	30	)	57	V
4	CTRL C	31	0	58	W
5	CTRL D	32	1	59	X
6	CTRL E	33	2	60	Y
7	CTRL F	34	3	61	`
8	CTRL G	35	4	62	a
9	CTRL H	36	5	63	b
10	CTRL I	37	6	64	c
11	CTRL P	38	7	65	d
12	CTRL Q	39	8	66	e
13	CTRL R	40	9	67	f
14	CTRL S	41	@	68	g
15	CTRL T	42	A	69	h
16	CTRL U	43	B	70	I
17	CTRL V	44	C	71	p
18	CTRL W	45	D	72	q
19	CTRL X	46	E	73	r
20	CTRL Y	47	F	74	s
21	Space	48	G	75	t
22	!	49	H	76	u
23	"	50	I	77	v
24	#	51	P	78	w
25	$	52	Q	79	x
26	%	53	R	80	y
27	&	54	S		

APPENDIX E

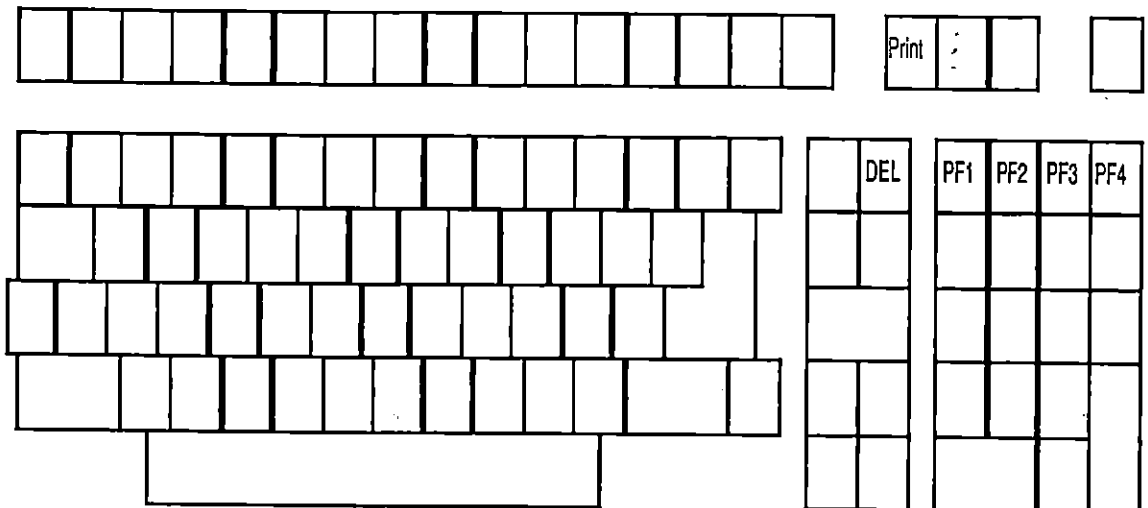
MONITOR MODE CONTROL CHARACTERS

A. Monitor mode control characters shall be displayed as two character mnemonics occupying one character location.

B. The "DEL" character shall be displayed as a block with alternating pixels on.

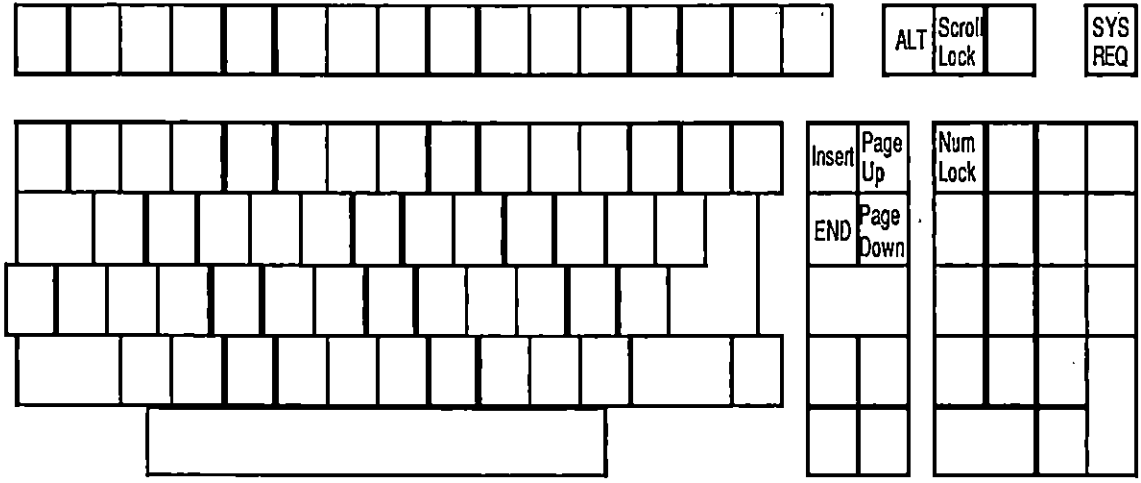
KEYBOARD CODE	ASCII NOMENCLATURE	HEX CHARACTER	DISPLAYED CHARACTERS
CTRL @	Null	00	NL
CTRL A	Start of header	01	SH
CTRL B	Start of text	02	SX
CTRL C	End of text	03	EX
CTRL D	End of transmission	04	ET
CTRL E	Enquiry	05	EQ
CTRL F	Acknowledge	06	AK
CTRL G	Bell (Audible tone)	07	BL
CTRL H	Backspace	08	BS
CTRL I	Horizontal tab	09	HT
CTRL J	Line feed	0A	LF
CTRL K	Vertical tab	0B	VT
CTRL L	Form feed	0C	FF
CTRL M	Carriage return	0D	CR
CTRL N	Shift out	0E	SO
CTRL O	Shift in	0F	SI
CTRL P	Data link escape	10	DL
CTRL Q	Device control 1	11	D1
CTRL R	Device control 2	12	D2
CTRL S	Device control 3	13	D3
CTRL T	Device control 4	14	D4
CTRL U	Negative Acknowledge	15	NK
CTRL V	Synchronous idle	16	SY
CTRL W	End of transmission block	17	EB
CTRL X	Cancel	18	CN
CTRL Y	End of medium	19	EM
CTRL Z	Substitute	1A	SB
CTRL [	Escape	1B	EC
CTRL \	File separator	1C	FS
CTRL]	Group separator	1D	GS
CTRL ^	Record separator	1E	RS
CTRL _	Unit separator	1F	US

KEYBOARD REMAPPING



ASCII STYLE KEYBOARD
VT100 MODE

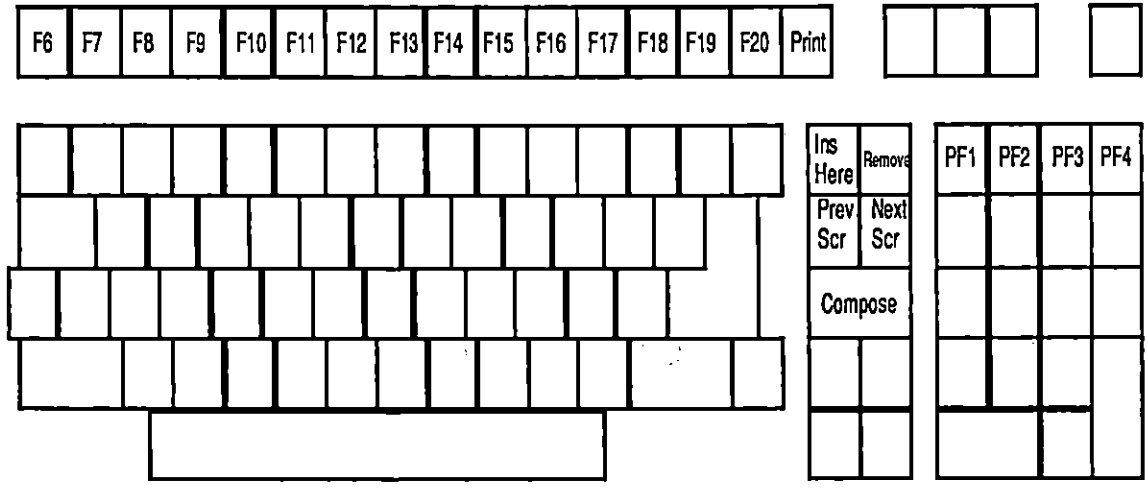
KEYBOARD REMAPPING



ASCII STYLE KEYBOARD
PCTERM MODE

KEYBOARD REMAPPING

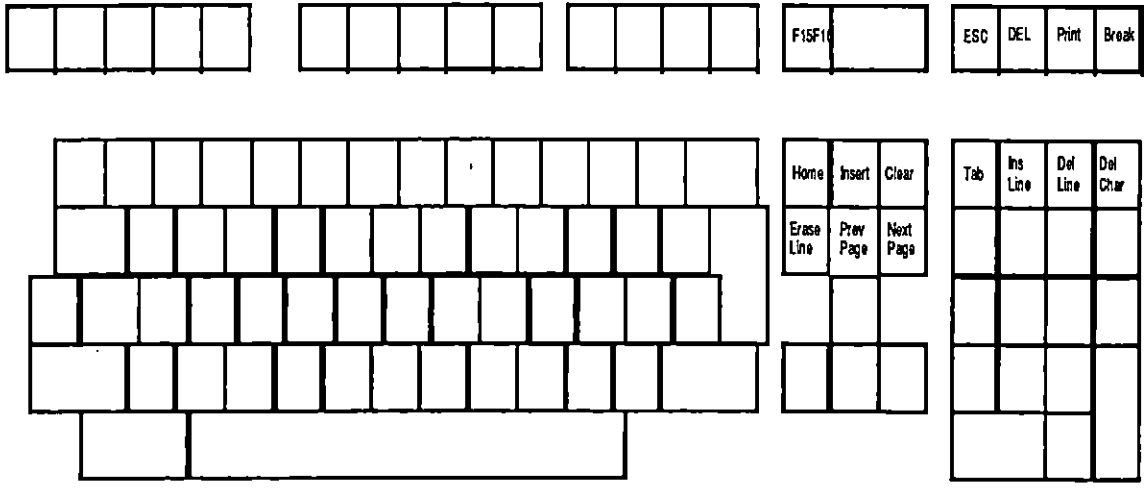
CTRL + ins here = fine CTRL + prev scr = select



ASCII KEYBOARD
ANSI MODE

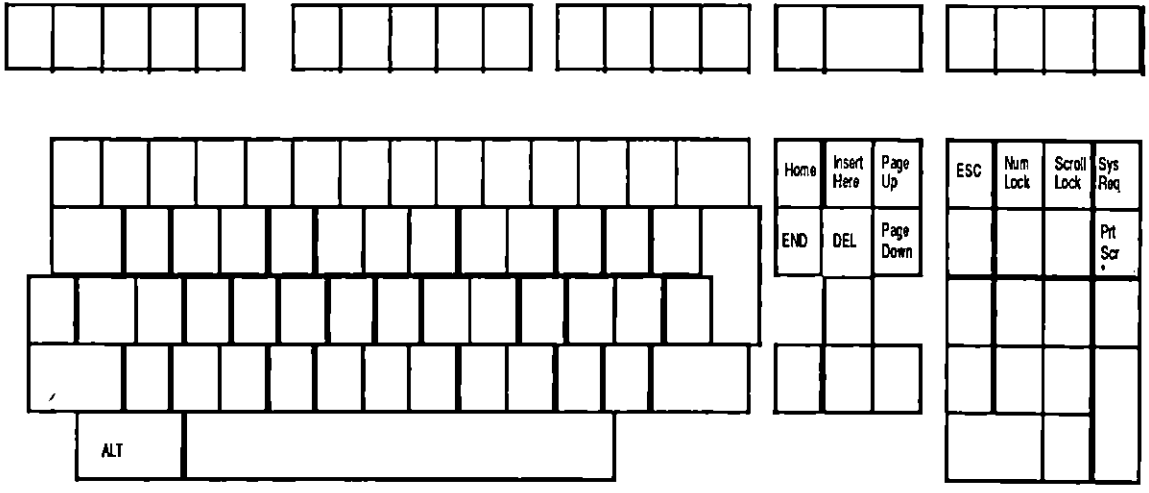
KEYBOARD REMAPPING

CTRL + F1 = Scroll CTRL + F2 = Print CTRL + F3 = Setup CTRL + F4 = Send CTRL + F5 = Break



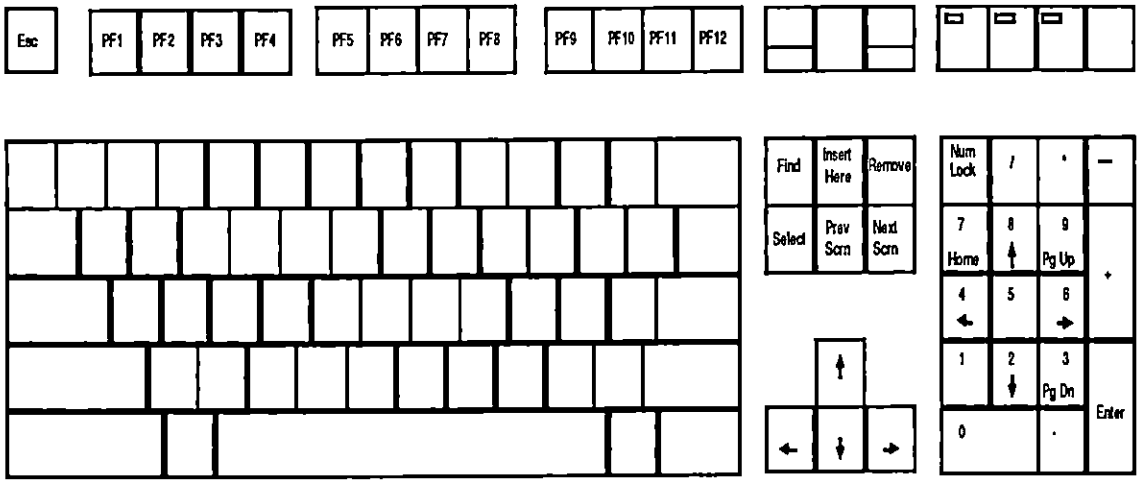
ANSI STYLE KEYBOARD
WYSE 50 MODE

KEYBOARD REMAPPING



ANSI STYLE KEYBOARD
PCTerm MODE

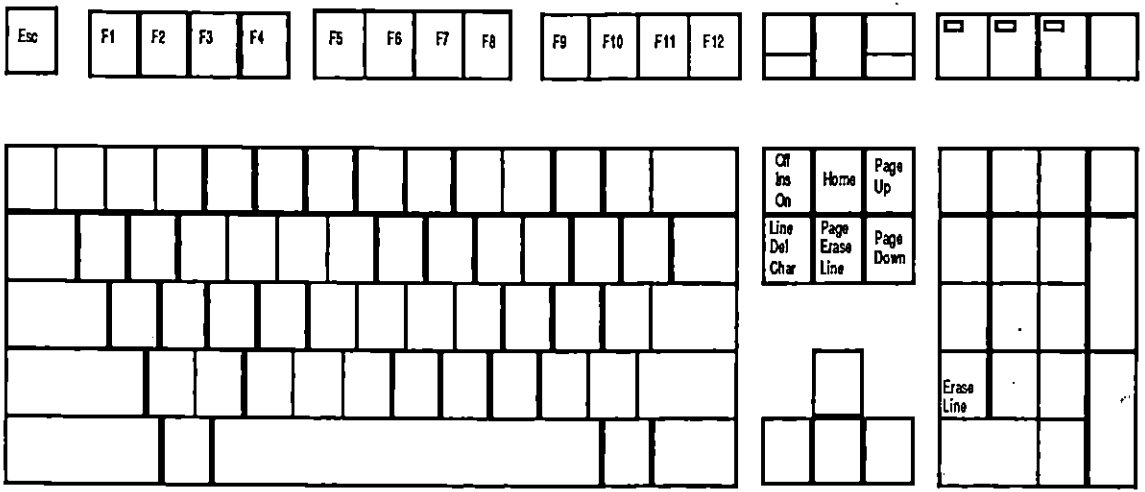
KEYBOARD REMAPPING



EPC STYLE KEYBOARD
ANSI MODES

KEYBOARD REMAPPING

CTRL + Ins = Ins Line



EPC STYLE KEYBOARD
ASCII MODES

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